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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/920,508

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James M. Carney

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08/26/2002

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EXAMINER

NGUYEN, PHUONGCHI T

ART UNIT

PAPER NUMBER

2833

DATE MAILED: 08/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/920,508

Applicant(s)

CARNEY ET AL.

Examiner

Phuongchi T Nguyen

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-22 is/are rejected.
- 7) ☒ Claim(s) 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

1. Applicant's amendment of May 20, 2002 is acknowledged. It is noted that claims 1 and 14 are amended; new claims 21 and 22 are added.
2. The papers filed on May 20, 2002 have not been made part of the permanent records of the United States Patent and Trademark Office (Office) for this application (37 CFR 1.52(a)) because of damage from the United States Postal Service irradiation process. The above-identified papers, however, were not so damaged as to preclude the USPTO from making a legible copy of such papers. Therefore, the Office has made a copy of these papers, substituted them for the originals in the file, and stamped that copy:

COPY OF PAPERS

ORIGINALLY FILED

If applicant wants to review the accuracy of the Offices copy of such papers, applicant may either inspect the application (37 CFR 1.14(d)) or may request a copy of the Offices records of such papers (*i.e.*, a copy of the copy made by the Office) from the Office of Public Records for the fee specified in 37 CFR 1.19(b)(4). Please do **not** call the Technology Centers Customer Service Center to inquiry about the completeness or accuracy of Offices copy of the above-identified papers, as the Technology Centers Customer Service Center will **not** be able to provide this service.

If applicant does not consider the Offices copy of such papers to be accurate, applicant must provide a copy of the above-identified papers (except for any U.S. or foreign patent documents submitted with the above-identified papers) with a statement that such copy is a complete and accurate copy of the originally submitted documents. If applicant provides such a copy of the above-identified papers and statement within **THREE MONTHS** of the mail date of this Office

action, the Office will add the original mailroom date and use the copy provided by applicant as the permanent Office record of the above-identified papers in place of the copy made by the Office. Otherwise, the Office's copy will be used as the permanent Office record of the above-identified papers (*i.e.*, the Office will use the copy of the above-identified papers made by the Office for examination and all other purposes). This three-month period is not extendable.

Claim Objections

3. Claims 3 and 22 are objected to because of the following informalities:

Claim 3, line 1, "the plurality of cavities" lacks proper antecedent basis. It appears that claim 3 should be dependent upon claim 2.

Claim 22, line 2, "the housing means" lacks proper antecedent basis. It appears that claim 22 should be dependent upon claim 14.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-11, 13-16 and 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Bakker (US5055055).

In regard to claim 1, Bakker discloses an apparatus comprising a housing (14) defining an interior cavity sized to surround at least one pin connector (17); and a mechanism (30) for removably securing the housing (14) over the pin connector (see figures 1, 2).

In regard to claim 2, Bakker discloses an apparatus comprising the interior cavity partitioned into a plurality of cavities (see figure 13).

In regard to claim 3, Bakker discloses an apparatus comprising the plurality of cavities accommodating multiple pin connectors attached to the circuit board (36) (see figure 13).

In regard to claim 4, Bakker discloses the apparatus wherein the mechanism (30) for removably securing the housing (14) over the pin connector (17) comprises an aperture (for 30 to be inserted into) for engaging a structure on the circuit board (36) (see figure 4).

In regard to claim 5, Bakker discloses the apparatus wherein the aperture (for 30 to be inserted) has an irregular shape to create an interfering fit (at 28) with the structure on the circuit board.

In regard to claim 6, Bakker discloses the apparatus further comprising a mechanism (30) to enable removal of the housing (14) from around the pin connector (17).

In regard to claims 7 and 8, Bakker discloses the apparatus wherein the mechanism (30) to enable removal comprises a pair of projections extending from a surface (the interior surface) of the housing (14) (see figure 2).

In regard to claims 9 and 10, Bakker discloses the housing is made of a semi-rigid material or resin (see column 4, line 50).

In regard to claim 11, Bakker discloses the housing is formed by injection molding process (see column 6, line 16).

In regard to claim 13, Bakker discloses the apparatus wherein the mechanism (30) for removably securing the housing (14) to the pin connector (17) comprises a plurality of apertures (where 30 are inserted into) (see figure 4).

In regard to claim 14, Bakker further discloses the apparatus comprising a mechanism (32) for aligning the interior cavity of the housing (14) with the pin connector (17) (see figure 2).

In regard to claim 15, Bakker discloses the apparatus wherein the mechanism (32) for aligning comprises at least one wall of the housing (below 28) shaped to mimic a feature of the pin connector (17) (see figure 2).

In regards to claim 16, Bakker discloses the apparatus wherein the mechanism for aligning comprises at least one fin (30) projecting from a surface of the housing to facilitate handling thereof.

In regard to claims 21 and 22, Bakker discloses the apparatus wherein a pin connector (17) is disposed within the interior cavity of the housing/housing means (see figure 1).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bakker (US5055055).

In regard to claim 17, Bakker discloses the apparatus wherein the mechanism (32) for aligning comprises an aperture (where 30 is inserted) accommodating a feature on the housing. It would have been obvious to one having ordinary skill at the time the invention was made to modify the apparatus of Bakker by reversing the feature and the aperture for easy assembly, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art.

In regard to claim 18, Bakker discloses a method for preventing damage or contamination of the pin connector comprising providing a protective cover (15) having an interior cavity (adjacent

48 or between 24; see figure 2) defined therein, for aligning the protective cover (15) with features (20, 16, 18) of the circuit board and pin connector, and removably securing the protective cover (15) adjacent the circuit board (36) so that the pin connector (17) is disposed within the interior cavity of the protective cover (15). The method taught by Bakker is not specifically for a computer system. However, since circuit boards such as that of Bakker are often in computer systems and frequently need protection, it would have been obvious to one having ordinary skill at the invention was made to provide the method of Bakker for a computer system.

In regard to claim 19, Bakker discloses the apparatus wherein the features comprise a cylindrical projection (18) and wherein the mechanism for aligning comprises an accurate-shaped surface on the protective cover (14), and wherein aligning the protective cover (14) with the features so that the cylindrical projection (18) is disposed along the accurate surface of the protective cover (14) (see column 5, lines 31-36).

In regard to claim 20, Bakker discloses the apparatus wherein the features comprise a cylindrical projection (18) and wherein the mechanism for removably securing comprises an irregular shaped aperture within the protective cover (14) and wherein disposing the cylindrical projection (18) within the irregular shaped aperture to frictionally secure the cylindrical projection (18) therein when the pin connector (17) is disposed within the cavity (see column 5, lines 31-36).

Allowable Subject Matter

6. Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

In regards to claim 12, none of prior art teaches or suggests the apparatus comprising an aperture extending through the housing and isolated from the interior cavity.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Foley (US749357) and Stokoe et al (US6238245B1) are cited to show a housing defining an interior cavity sized to surround at least one pin connector; and a mechanism for removably securing the housing over the pin connector.

Response to Arguments

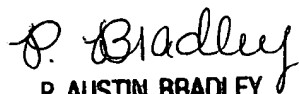
9. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuongchi T Nguyen whose telephone number is (703) 305-0729. The examiner can normally be reached on Monday through Thursday from 8:00AM to 4:30PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on (703) 308-2319. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7723 for regular communications and (703) 305-7723 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3329.

August 20, 2002


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